

Amendment to the Drawings:

The attached sheet of drawings includes changes to Fig. 5, and replaces the original sheet including Fig. 5. In particular, element 10 has been deleted from Fig. 5.

Attachment: Replacement Sheet
 Annotated Sheet Showing Changes

REMARKS

Favorable reconsideration and allowance of the present application is respectfully requested.

Claims 1-39 are currently pending in the present application, including independent claims 1, 15, and 25. Independent claim 1, for instance, is directed to a flexible laminate structure comprising a first substrate containing a thermoplastic polymer and a second substrate containing a thermoplastic polymer. The thermoplastic polymer of each substrate is fused to form fused portions and unfused portions located between the fused portions. The unfused portions of the first substrate and the second substrate define pockets containing discrete regions of a functional material selected from the group consisting of particles, liquids, and combinations thereof. The pockets have an approximate width to height ratio of less than about 10.

In the Office Action, independent claims 1, 15, and 25 were rejected under 35 U.S.C. §102(b) and/or §103(a) in view of U.S. Patent No. 4,892,535 to Bjornberg, et al. Bjornberg, et al. is directed to absorbent pads of the type used to form incontinence pads. As shown in Figs. 1-3, for example, a pad 1 includes a liquid-impervious back sheet 3 on which are contained a plurality of spaced bodies 4 of absorbent material. The absorbent material has a high capacity for absorbing liquid, and may be formed from fluff pulp. The bodies 4 are contained in pockets 5 formed in a continuous liquid-impervious cover sheet 7 that overlies the bodies 4 and is directly secured to the back sheet 3 along channels 9. In use, the pad 1 may be placed beneath the incontinent person, whose weight is borne by the filled pockets, leaving open the channels 9. Liquid from the person's body readily penetrates the cover sheet 7 and is absorbed by

the bodies 4 of absorbent material. When the bodies 4 are full, the excess liquid passes along the channels 9 to the nearest dry pockets 5, where the liquid is absorbed from the channels 9 through the side walls of the pockets 5.

However, Bjornberg, et al. fails to teach certain aspects of independent claims 1, 15, and 25. For example, independent claims 1, 15, and 25 each require that the unfused portions of the first and second substrates define the pockets. In this manner, a three-dimensional surface texture is imparted to side of the laminate. As shown in Fig. 1C of the present application, for example, a surface of each substrate 12 and 14 is raised at the location of the pockets 20. To the contrary, the pockets 5 of Bjornberg, et al. are pre-formed into the liquid-pervious cover sheet 7. (Cols. 5-6). This pre-formed cover sheet 7 is then laminated to the liquid-impervious back sheet 3, which is expressly shown and described as being substantially flat (See e.g., Figs. 2-3 and Claim 5). The present inventors have discovered that such a three-dimensional surface texture may provide substantial benefits over a laminate in which one of the fused substrates is substantially flat. For instance, if the second substrate 14 were placed against the skin of a user, its three-dimensional surface texture would still allow air to readily flow through the depressions formed by the fused portions 24 (See e.g., Fig. 1C). On the other hand, if the second substrate 14 were substantially flat as in Bjornberg, et al., air would not be able to contact the skin as easily because the entire surface of the substrate 14 would be pressed against the skin. In addition, the geometric constraints of a substantially flat substrate might also inhibit water flow between pockets. Further, a laminate with a three-dimensional surface texture on each side may provide enhanced comfort and/or resiliency in certain applications. Thus, for at least the reasons set forth

above, Applicants respectfully submit that independent claims 1, 15, and 25 patentably define over Bjornberg, et al.

In the Office Action, independent claims 1, 15, and 25 were also rejected under 35 U.S.C. §103(a) in view of U.S. Patent No. 5,938,650 to Baer, et al. Baer, et al. is directed to an absorbent core for absorbing liquids. The absorbent core consists essentially of a pair of flat outer thin sheets 10 and 12, and a quantity of superabsorbent polymer particles 14. (Fig. 1). The dry form of the absorbent core is shown in Fig. 2. Additional bonding patterns are shown in Figs. 5-7. As indicated, a thin, patterned partial flat laminate is provided that has a plurality of flat unbonded zones 30 or individual pockets connected together by a plurality of intersecting indented thermal bond lines 32. At the bond lines 32, some of the fibers of the adjacent fabric faces are at least partially fused together by heat and pressure. The fabric is not completely fused along these lines, although the bond is permanent and will not delaminate during initial swelling of the pockets.

As correctly noted by the Examiner, however, Baer, et al. fails to teach several aspects of the present claims. For instance, nowhere does Baer, et al. disclose pockets having an approximate width to height ratio of less than about 10. Nevertheless, in the Office Action, it was stated that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the laminate of Baer, et al. to reflect a pocket size consistent with the claimed range as a result of routine experimentation to discover an optimal or workable pocket size. However, before a certain range can be determined to be obvious from the result of routine experimentation, the particular range must first be recognized as result-effective. See e.g., MPEP §2144.05 IIB. In this

instance, Baer, et al. completely fails to recognize that such a width to height ratio would have the desired affect on pocket flexibility, particularly when the functional material is inflexible (e.g., activated carbon). In fact, the only mention of size in Baer, et al. relates to the thickness of the laminate. Baer, et al. simply fails to recognize the importance of the pocket size on the degree of flexibility. As such, Applicants respectfully submit that the claimed width to height ratio would not have been obvious as a result of routine experimentation.

Applicants emphasize that the teachings of a reference must be viewed in its entirety, i.e., as a whole, to sustain a *prima facie* case of obviousness under 35 U.S.C. §103(a). In addition, the differences between a particular claim and the cited reference cannot be viewed in a vacuum. Instead, the entire claimed invention must be considered as a whole. Applicants respectfully submit that, when properly viewed as a whole, there is simply no motivation to modify the cited reference in an attempt to render obvious claims 1, 15, and 25.

In addition, the above-cited references were also cited alone and/or in various combinations to reject dependent claims 2-14, 16-24, and 26-39. Applicants respectfully submit, however, that at least for the reasons indicated above relating to corresponding independent claims 1, 15, and 25, claims 2-14, 16-24, and 26-39 patentably define over the references cited. However, Applicants also note that the patentability of dependent claims 2-14, 16-24, and 26-39 does not necessarily hinge on the patentability of independent claims 1, 15, and 25. In particular, some or all of these claims may possess features that are independently patentable, regardless of the patentability of claims 1, 15, and 25.

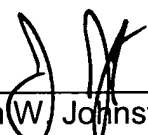
Besides the rejections discussed above, the Examiner also objected to the drawings. It is believed the corrections submitted herewith overcome these objections.

As such, for at least the reasons set forth above, Applicants respectfully submit that the present claims patentably define over all of the prior art of record. It is believed that the present application is in complete condition for allowance and favorable action, therefore, is respectfully requested. Examiner Berfumo is invited and encouraged to telephone the undersigned, however, should any issues remain after consideration of this response.

Please charge any additional fees required by this Amendment to Deposit Account No. 04-1403.

Respectfully submitted,

DORITY & MANNING, P.A.



Jason W. Johnston
Registration No.: 45,675

DORITY & MANNING, P.A.
P.O. Box 1449
Greenville, SC 29602-1449
Phone: (864) 271-1592
Facsimile: (864) 233-7342

Date: 1/9/04



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ANNOTATED SHEET SHOWING CHANGES

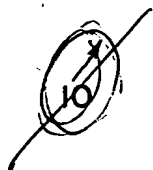
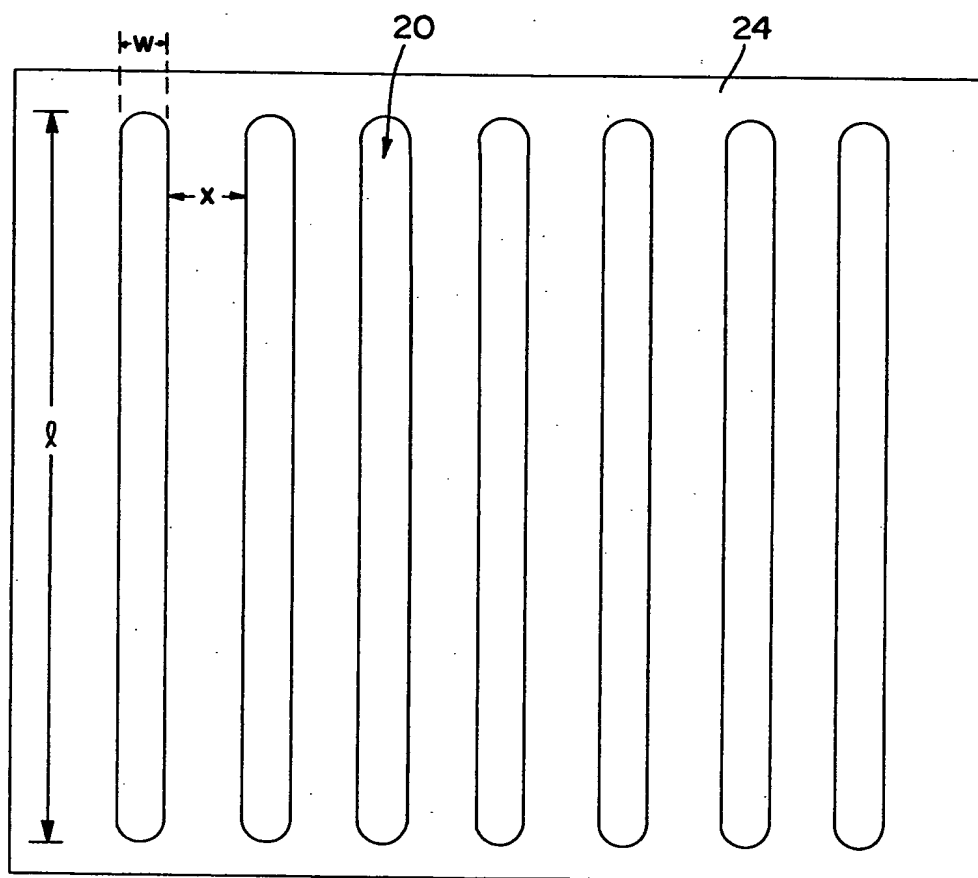


FIG. 5